

**CLAIMS**

1. A data transmission system for distributing predetermined data through transmission paths, the data transmission system comprising:

a data transmitting apparatus including data supply means for supplying the data, transmission control means for dividing the data supplied by the data supply means into a predetermined number of data files to distribute the divided divisional data files, and data transmitting means for transmitting each of the distributed divisional data files respectively through a predetermined transmission path; and

a data receiving apparatus including data receiving means for receiving the divisional data files transmitted through the predetermined transmission paths, data receiving control means for restoring the received divisional data files into original data, and data output means for outputting the restored data.

2. The data transmission system as set forth in claim 1, wherein the data supply means stores data files generated in advance, to deliver the stored data files as occasion demands.

3. The data transmission system as set forth in claim 1, wherein the data supply means supplies data generated in real time.

4. The data transmission system as set forth in claim 1, wherein the transmission control means of the data transmitting apparatus divides the data into data files corresponding to a number of transmittable paths in advance, to distribute each of the divisional data files respectively to the data transmitting means connected to the

transmittable paths.

5. The data transmission system as set forth in claim 1, wherein the transmission control means of the data transmitting apparatus divides the data in units of a predetermined transmission frame to distribute each of the divisional data files respectively to the data transmitting means.

6. The data transmission system as set forth in claim 1, wherein the data transmitting means of the data transmitting apparatus further detects a state as to whether the transmission path connected to the transmitting means can be used or not, and transmits the detected state serving as transmission path information to the transmission control means, and

wherein the transmission control means of the data transmitting apparatus further collects the transmission path information to calculate a number of usable transmission paths to divide the data in correspondence the calculated number to distribute each of the divisional data files respectively to the usable data transmitting means.

7. The data transmission system as set forth in claim 1, wherein each of the transmission paths is formed by a plurality of transponders mounted in satellite.

8. A data transmitting apparatus for transmitting predetermined data through transmission paths, the data transmitting apparatus comprising:

data supply means for supplying the data;

transmission control means for dividing the data supplied by the data supply

means into a predetermined number of data files to distribute the divided divisional data files; and

data transmitting means for transmitting each of the distributed divisional data files respectively through a predetermined transmission path.

9. A data receiving apparatus for receiving predetermined data through transmission paths, the data receiving apparatus comprising:

data receiving means for receiving a plurality of divisional data files transmitted through the plural predetermined transmission paths;

data receiving control means for restoring the plurality of the received divisional data files into original data; and

data output means for outputting the restored data.

10. A data transmission method for distributing predetermined data through transmission paths, the data transmission method comprising the steps of:

inputting the predetermined data to divide the input data into a predetermined number of data files to generate divisional data files to transmit each of the divisional data files through a predetermined transmission path; and

receiving each of the divisional data files transmitted through the predetermined transmission paths to restore the received divisional data files into original data to output the restored data.

11. A data transmission system for transmitting moving picture data files through transmission paths, the data transmission system comprising:

a data transmitting apparatus including data dividing means for dividing one moving picture data file into a plurality of divisional distribution data files which are restored to an original data file by synthesis, and data transmitting means for transmitting each of the divided divisional distribution data files to each of a plurality of transmission paths which are different from each other; and

a data receiving apparatus including data receiving means for receiving the plural divisional distribution data files from the plurality of the different transmission paths, and restoring means for synthesizing the plurality of the received divisional distribution data files to restore one moving picture data file.

12. A data transmitting apparatus for transmitting moving picture data files through transmission paths, the data transmitting apparatus comprising:

data dividing means for dividing one moving picture data file into a plurality of divisional distribution data files which are restored to an original data file by synthesis;  
and

data transmitting means for transmitting each of the divided divisional distribution data files to each of a plurality of transmission paths which are different from each other.

13. A data receiving apparatus for receiving moving picture data files through transmission paths, the data receiving apparatus comprising:

data receiving means for receiving, from each of a plurality of transmission paths which are different from each other, a plurality of divisional distribution data

files which are restored to an original data file by synthesis; and

restoring means for synthesizing the plurality of received divisional distribution data files to restore one moving picture data file.

14. A data transmission method for transmitting moving picture data files through transmission paths, the data transmission method comprising the steps of:

dividing one moving picture data file into a plurality of divisional distribution data files which are restored to an original data by synthesis;

transmitting each of the divided divisional distribution data files to each of a plurality of transmission paths which are different from each other;

receiving the plurality of divisional distribution data files from the plurality of the different transmission paths; and

synthesizing the plurality of the received divisional distribution data files to restore one moving picture data file.

15. A data transmission system for transmitting movie contents files through satellite transponders, the data transmission system comprising:

a data transmitting apparatus including data dividing means for dividing one movie contents file into a plurality of divisional distribution data files which are restored to an original data file by synthesis, and data transmitting means for transmitting each of the divided divisional distribution data files to each of a plurality of satellite transponders which are different from each other; and

a data receiving apparatus including data receiving means for receiving the

plurality of divisional distribution data files from the plurality of the different satellite transponders, and restoring means for synthesizing the plurality of the received divisional distribution data files to restore one movie contents file.

16. A data transmitting apparatus for transmitting movie contents files through satellite transponders, the data transmitting apparatus comprising:

data dividing means for dividing one movie contents file into a plurality of divisional distribution data files which are restored to an original data file by synthesis;

and

data transmitting means for transmitting each of the divided divisional distribution data files to a plurality of satellite transponders which are different from each other.

17. A data receiving apparatus for receiving movie contents files through satellite transponders, the data receiving apparatus comprising:

data receiving means for receiving, from a plurality of different satellite transponders, a plurality of divisional distribution data files which are restored to an original data file by synthesis; and

restoring means for synthesizing the plurality of received divisional distribution data files to restore one movie contents file.

18. A data transmission method for transmitting movie contents files through satellite transponders, the data transmission method comprising the steps of:

dividing one movie contents file into a plurality of divisional distribution data

- files which are restored to an original data file by synthesis;
- transmitting each of the divided divisional distribution data files to a plurality of satellite transponders which are different from each other;
- receiving the plurality of divisional distribution data files from the different plural satellite transponders; and
- synthesizing the plurality of the received divisional distribution data files to restore one movie contents file.